

Ex.-PSC-Hubert-3p
Docket 9400-YO-100
Witness: Lois Hubert
March 11, 2015
Cover Page

Wisconsin Energy Corporation/Integrus Energy Group

Exhibit 3 Schedules

Description	Schedule
Non-confidential response to Staff data request PSCW-26.01 regarding Liberty Report PSC REF#: 232778	1
Confidential Liberty Consulting Interim Audit Report PSC REF#: 232777	2
Response to Staff data request PSCW-26.02 regarding Accelerated Main Replacement Program costs PSC REF#: 232788	3

Prepared by: Lois Hubert
Public Utility Financial Analyst, Gas and Energy Division
Public Service Commission of Wisconsin

**Application of Wisconsin Energy Corporation for Approval to Acquire the
Outstanding Common Stock of Integrys Energy Group, Inc.
PSCW Docket No. 9400-YO-100**

**Integrys' Response to
PSCW Commission Staff's 26th Data Request
Dated: March 3, 2015**

REQUEST NO. PSCW-26.01:

Regarding Data Request No. PSCW-01.38 dated: September 5, 2014 and the summary of the events and issues related to the Illinois Commerce Commission's audit of Peoples Gas Accelerated Main Replacement Program. It was stated Liberty Consulting was awarded an audit that spans two phases. The audit is ongoing and there have been no findings made as of yet.

It is staffs understanding that an interim audit report was completed. Please provide a copy of the above mentioned Liberty Consulting interim audit report(s).

INTEGRYS RESPONSE:

The Liberty Consulting interim audit is considered confidential, and will be provided under the terms of the confidentiality agreement. There is no attachment to this document.

Answered by: James Schott

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Ex.-PSC-Hubert-3p
Docket 9400-YO-100
Witness: Lois Hubert
March 11, 2015
Schedule 2
Page 1 of 1

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Docket 9400-YO-100
Witness: Lois Hubert
March 11, 2015
Schedule 3
Page 1 of 32

**Response to
PSCW Commission Staff's 26th Data Request
Dated: March 3, 2015**

REQUEST NO. PSCW-26.02:

Regarding Request No. AG 15.04: which was filed at the PSCW on Feb 17, 2015. Explain what additional review WEC has performed since the AMRP cost has increased from \$2.5 billion to \$4.6 billion.

INTEGRYS RESPONSE:

Attached please see the Direct Testimony of David Lazzaro from The Peoples Gas Light and Coke Company ("Peoples Gas") 2014 rate case. Beginning on page 9 of this testimony a description of the AMRP project is discussed.

Also see Integrys's response to the Illinois Attorney General's Data Request AG 10.18 (PSC REF# 229176) which discusses the increase in cost estimates of the AMRP project from \$2.2 billion to \$4.6 billion. (Note that the \$2.2 billion figure in the data request was based on an exhibit to testimony from Peoples Gas' 2009 rate case. Prior to being entered into the record, the exhibit was revised and the \$2.5 billion appears in the revised exhibit.)

Answered by: James Schott

WISCONSIN ENERGY RESPONSE:

Prior to consummating the merger in June 2014, Wisconsin Energy and Integrys engaged in several months of due diligence in which the companies' management, financial advisors, and outside experts shared non-public financial information and projections, operational data, capital investment plans, and strategic outlooks. This was discussed in Wisconsin Energy's SEC Form S-4, dated August 13, 2014 (at p. 42). As is customary in such transactions, Wisconsin Energy's pre-transaction due diligence did not include an investigation into the specifics of Integrys' utilities' "on-the-ground" operations, including Peoples Gas' AMRP project. It is typical and appropriate for this detailed operational work to be performed once approval for the merger has been received and merger integration activities have begun. Pre-merger due diligence typically involves an assessment of the material condition of the target company, an analysis of whether the financial and economic projections are reasonable, and an evaluation of the business, financial and regulatory risk of the target company.

During the due diligence process, however, Integrys' management did make Wisconsin Energy's management aware of the AMRP program, its general status and goal of being completed by the year 2030, and the legislatively-authorized Rider QIP that allows annual recovery for certain of

the AMRP's capital expenditures in-between rate cases. These disclosures included information regarding the overall cost of the AMRP being estimated to be in the neighborhood of \$4.6 billion. In a publicly-disclosed presentation to industry analysts on August 7, 2013, Integrys had stated that the AMRP is a 20-year program which would cost between \$2.2 and \$2.6 billion over its first ten-years. (See JA ENG 2.10 Attach 02 (PSC REF# 220306) at p. 49, from Illinois data request responses) Wisconsin Energy's due diligence files show that this information was incorporated into and considered as part of its analysis of the whether or not to enter into the merger transaction. (See JA DLH 1.02 Attach 04 (PSC REF# 223925) CONFIDENTIAL at p. 13; WEC DLH 1.02 Attach 10 (PSC REF# 223925) CONF & PROP at p. 3; WEC DLH 1.02 Attach 13 (PSC REF# 223925) CONF & PROP at pp. 5-6, from Illinois data request responses)

As reflected in Wisconsin Energy's SEC Form S-4, dated August 13, 2014 (at p. 54), the Wisconsin Energy Board considered the risks inherent in Integrys' business and operations, including risks relating to future rates and returns associated with Integrys' business operations and risks associated with Integrys' contingent liabilities, and believed that these risks were manageable as part of the ongoing business of the combined company. Put into the context of the overall merger transaction, the AMRP will represent \$250 to \$300 million per year in capital expenditures measured against a total capital program for the combined company of approximately \$1.5 billion, or approximately 20% of the annual capital budget. Also, measured against the entire asset base of approximately \$17 billion for the combined company, annual capital expenditures on the AMRP represent 1.75% of the aggregate enterprise value or asset value of the combined company. (See 2/19/2015 Illinois Tr. at 426 (Reed), excerpt attached)

With respect to the actual implementation and management of the AMRP, while Wisconsin Energy's pre-merger due diligence did not include an investigation into the specifics of Peoples Gas' AMRP operations, Wisconsin Energy's management was aware that the Illinois Commerce Commission and other interested stakeholders had raised concerns about the need for improvements. In its order entered in Peoples Gas' 2012 rate case on June 18, 2013,¹ the Illinois Commerce Commission ordering an audit of the AMRP by an engineering consultant (the Liberty Consulting Group, or "Liberty") which would result in a published final report that included recommendations for the improvement of the AMRP's implementation and management, to be followed by a two-year period in which Liberty will work with Peoples Gas and the Staff of the Illinois Commerce Commission to verify the appropriate implementation of its recommendations.

Through the pendency of the approval proceeding in Illinois, Wisconsin Energy has obtained additional specific information regarding the status of the AMRP project that demonstrates that the Peoples Gas is capable of completing the replacement of the remaining cast-iron and ductile-iron distribution mains and services in the utility's service territory by the 2030 target date. This information has included an "Interim Report" prepared by Liberty before the conclusion of the investigation phase of its audit and disclosed on a Confidential basis by Illinois Commerce Commission Staff in the approval proceeding. Wisconsin Energy's management has reviewed the Liberty Interim Report and found its preliminary recommendations to be reasonable, and that it identified helpful opportunities for adjustments that will allow the project to be executed in an

¹ *North Shore Gas Co., The Peoples Gas Light and Coke Co. – Proposed General Increase in Rates*, ICC Docket Nos. 12-0511/12-0512 (cons.), Order (June 18, 2013) at 61.

appropriate manner over the remaining course of its life. Wisconsin Energy's management also supports the initiatives being undertaken and developed by Peoples Gas and Integrys in response to those recommendations, as outlined in the Liberty Interim Report, and have met with members of Peoples Gas' and Integrys' management to confirm that an action plan for addressing Liberty's preliminary recommendations is being developed.

Overall, based on the information reviewed concerning the AMRP, Wisconsin Energy remains convinced that it has the experience in managing large capital programs and resources to "step into the shoes" of Integrys with respect to the management and implementation of the AMRP. Wisconsin Energy is ready, willing, and able to continue the AMRP consistent with recommendations from Liberty's final audit report that are possible, practical, reasonable, and cost-effective to implement.

Answered by: Allen Leverett

1 A Yes.

2 Q Now, could you please explain in connection
3 with your testimony that that question was related to
4 whether or not the costs -- whether the cost of the
5 AMRP being 2 and a half billion or 4 and a half
6 billion, as been discussed in this case, whether or
7 not those amounts were material for purposes of the
8 due diligence that was performed by Wisconsin Energy
9 in consideration of acquiring Integrys Energy Group?

10 A When viewed in the context of the larger
11 transaction, those amounts equal about 250 to
12 \$300 million per year in capital expenditures on AMRP
13 measured against a total capital program of
14 1.5 million, so they're about 20 percent of the
15 annual capital budget.

16 And they're also measured for
17 relevance of whether they're material. They're
18 measured against the entire asset base of the
19 company, which is \$17 billion. That's about
20 1.75 percent per year for the capital expenditures on
21 the AMRP as compared to the aggregate enterprise
22 value or asset value of the combined company.

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

The Peoples Gas Light and Coke Company :
: No. 14-225
Proposed General Increase :
In Rates For Gas Service :

Second Revised Direct Testimony of

DAVID J. LAZZARO

General Manager, District Field Operations
The Peoples Gas Light and Coke Company

On Behalf of
The Peoples Gas Light and Coke Company

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION AND BACKGROUND	1
A. Identification of Witness.....	1
B. Purpose of Testimony	1
C. Summary of Conclusions	2
D. Itemized Attachments to Direct Testimony	3
E. Background and Experience	3
II. PEOPLES GAS’ PHYSICAL SYSTEM.....	4
A. Gross Utility Plant.....	5
B. Cost Control and Investment	8
III. SUMMARY OF MAJOR CAPITAL PROJECTS	8
A. Accelerated Main Replacement Program	9
(1) Overview and History	9
B. Calumet System Upgrade Project	17
C. Casing Remediation Program	20
IV. GAS PLANT IN SERVICE ADDITIONS SINCE THE 2012 RATE CASES.....	20
V. SCHEDULE C-4 ACCOUNT VARIANCES	22
VI. TEST YEAR EMPLOYEES.....	23

I. INTRODUCTION AND BACKGROUND

A. Identification of Witness

Q. Please state your name and business address.

A. My name is David J. Lazzaro. My business address is 1250 S. Kilbourn Ave., Chicago, Illinois 60623.

Q. By whom are you employed and in what capacity?

A. I am employed by The Peoples Gas Light and Coke Company (“Peoples Gas” or “PGL”) as General Manager, District Field Operations.

B. Purpose of Testimony

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my testimony, in brief, is, first, to describe Peoples Gas’ physical system and operations and the manner in which Peoples Gas ensures that its capital expenditures relating to its physical system are prudently incurred and at reasonable cost. As part of this discussion, I describe the key components of Gross Utility Plant which are included in rate base by Peoples Gas witness Mr. John Hengtgen (PGL Exhibit (“Ex.”) 7.0). I also confirm that the Gross Utility Plant assets added since the last general rate case, Docket Nos. 12-0511/12-0512 (cons.) (“2012 Rate Cases”), are or will be used and useful and were or will be prudently acquired and placed into service at a reasonable cost, other than for Underground Storage, Liquefied Natural Gas (“LNG”) Plant and Recoverable Natural Gas, which are addressed by Peoples Gas witness Mr. Thomas Puracchio (PGL Ex. 16.0) and Intangible Plant, Production Plant, and Construction Work in Progress (“CWIP”), which are addressed by Mr. Hengtgen. My testimony does not address project-related costs that Peoples Gas has excluded from its test year revenue requirement calculation

24 because it expects to recover those costs through Rider QIP, Qualifying Infrastructure
25 Plant, during the test year. Please see the direct testimony of Peoples Gas witnesses
26 Mr. Dennis Derricks (PGL Ex. 1.0), Ms. Sharon Moy (PGL Ex. 6.0), and Mr. Hengtgen
27 for a discussion of Rider QIP and related ratemaking adjustments.

28 Second, I present support for three of Peoples Gas' major capital projects for the
29 test year, calendar year 2015. I address whether these investments have been or will be
30 prudently undertaken, reasonable in cost, and used and useful in providing utility service.

31 Third, I describe how Peoples Gas determined the amount of additions for
32 Distribution, Transmission – Not Leased, and General Plant for the test year.

33 Fourth, I explain the increase in operating expenses between 2012 and the test
34 year, 2015, attributable to the Legacy Sewer Cross Bore Program and the Chicago
35 Department of Transportation ("CDOT") Regulations.

36 Finally, I address the number of Peoples Gas' employees for the test year.

37 **C. Summary of Conclusions**

38 **Q. Please summarize the conclusions you make in your direct testimony.**

39 A. As to Gross Utility Plant, other than Intangible Plant, Production Plant, CWIP, LNG
40 Plant, Recoverable Natural Gas, and Underground Storage, which are addressed by
41 Mr. Hengtgen and Mr. Puracchio, I conclude that all of Peoples Gas' properties recorded
42 in its property accounts, including assets added since the 2012 Rate Cases, were
43 prudently acquired, reasonable in cost, and used and useful in rendering of utility service.

44 With respect to major capital projects, I also conclude that the Accelerated Main
45 Replacement Program ("AMRP"), the Calumet System Upgrade Project and casing

remediation program are and will be prudently undertaken, reasonable in cost, and used and useful in providing utility services to customers served by Peoples Gas.

Finally, as to the increased employee headcount since the last rate case, I conclude that the headcount increases for Peoples Gas are fully supported and required to meet the needs of AMRP and increased compliance expectations from federal and state pipeline safety administrators.

D. Itemized Attachments to Direct Testimony

Q. Are there any attachments to your testimony?

A. Yes. I have the following attachments to my direct testimony:

- PGL Ex. 8.1 is a copy of Schedule F-4, which is also included in Peoples Gas' required filings satisfying 83 Illinois Administrative Code Part 285, showing major additions to rate base;
- PGL Ex. 8.2 is a detailed breakdown of costs associated with AMRP for years 2012 through 2014;
- PGL Ex. 8.3 consists of screen shots from our purchasing system showing executive approvals related to the 2014 Calumet System Upgrade Project;
- PGL Ex. 8.4 is the Calumet System Upgrade Project Cost for years 2013 through 2014; and
- PGL Ex. 8.5 is the approved business case for the Calumet System Upgrade Project.

E. Background and Experience

Q. Please summarize your educational background and experience.

68 A. I graduated from University of Illinois in 1987 with a Bachelor of Science in Electrical
69 Engineering. I have worked for Integrys Energy Group, Inc. (“Integrys”) and its utility
70 subsidiaries for over 26 years and have held many positions with increasing responsibility
71 within gas operations, including Operations Manager of South District and Manager of
72 Pipeline Operations. Peoples Gas is a wholly-owned indirect subsidiary of Integrys
73 Energy Group, Inc. I assumed my current position in July 2011.

74 **Q. What are your responsibilities in your current position?**

75 A. I am responsible for all gas distribution utility field operations in the Peoples Gas Central
76 District including customer service, distribution system maintenance, and construction.

77 **II. PEOPLES GAS’ PHYSICAL SYSTEM**

78 **Q. Please describe Peoples Gas’ physical system.**

79 A. Peoples Gas is a local distribution company selling and/or distributing gas to
80 approximately 829,000 customers in the City of Chicago (“City”), which is 237 square
81 miles. Peoples Gas’ distribution system consists of approximately 4,169 miles of gas
82 distribution mains. Peoples Gas owns approximately 419 miles of transmission lines.
83 Peoples Gas’ distribution system is most commonly operated at a pressure range of 0.25
84 to 25 pounds per square inch, while the transmission system operates at pressures up to
85 300 pounds per square inch or more. Peoples Gas owns a storage field, Manlove Field,
86 which is discussed in detail in Mr. Puracchio’s direct testimony.

87 **Q. How would you describe the physical configuration of the Peoples Gas’ system?**

88 A. The physical configuration of Peoples Gas’ system is a dispersed/multiple city-gate,
89 integrated transmission/distribution and multi pressure-based system.

90 **Q. What considerations have gone into the design of the Peoples Gas system?**

91 A. Peoples Gas' system is designed to provide gas service to all customers entitled to be
92 attached to the system, to deliver volumes of natural gas to all sales and transportation
93 customers, and to meet the aggregate peak design day capacity requirements of all
94 customers entitled to service on the peak day. A gas utility system sized only to
95 accommodate average gas demands would not be able to meet system peak demands.

96 **A. Gross Utility Plant**

97 **Q. Are you familiar with the types of Plant summarized on Schedule B-5 of Peoples**
98 **Gas Ex. 7.1, sponsored by Mr. Hengtgen?**

99 A. Yes, I am, with respect to Distribution, Transmission -- Not Leased, and General Plant.
100 Schedule B-5 is sponsored by Mr. Hengtgen, and described in his testimony. That
101 schedule sets forth gross additions, retirements and transfers to Peoples Gas' plant in
102 service and concludes with plant balances at December 31, 2015 (Schedule B-5, page 2,
103 Column J). Peoples Gas' total plant in service, Account 101 plus Completed
104 Construction Not Classified, Account 106, is \$4,177,644,000 at December 31, 2015
105 (Schedule B-5, page 2, Column J, line 9).

106 **Q. In your opinion, is the Distribution, Transmission-Not Leased, and General Plant,**
107 **represented on Schedule B-5 used and useful in Peoples Gas' rendering of utility**
108 **service?**

109 A. Yes. All of that Plant is or will be used and useful.

110 **Q. Are you familiar with the major categories of plant?**

111 A. Yes. The major categories of plant are Distribution, Underground Storage, Liquefied
112 Natural Gas, Transmission-Not Leased, General, Intangible, Production, Recoverable
113 Natural Gas, and CWIP. I will discuss Distribution, Transmission-Not Leased, and
114 General Plant, below. Mr. Puracchio will discuss Underground Storage Plant, LNG
115 Plant, and Recoverable Natural Gas. Mr. Hengtgen will discuss Intangible, Production,
116 and CWIP.

117 **Q. Please describe Peoples Gas' test year Distribution Plant.**

118 A. Peoples Gas' Distribution Plant is \$3,038,291,000 at the end of the test year. (See
119 Schedule B-5). Distribution Plant is comprised of 4,169 miles of distribution mains and
120 related facilities, such as service pipes, regulators, valves and meters. Distribution
121 facilities are typically connected directly to our customers.

122 **Q. How is the Distribution Plant used to provide service to Peoples Gas' customers?**

123 A. Customers are serviced directly by the distribution system through company-owned
124 service lines linking the distribution mains with customer owned piping.

125 **Q. Please describe Peoples Gas' test year Transmission-Not Leased Plant.**

126 A. Peoples Gas' Transmission-Not Leased Plant is \$187,426,000 at the end of the test year.
127 Transmission Plant consists of the larger size and higher pressure pipelines and related
128 facilities (*e.g.*, valves, and regulators) typically used to move gas from Manlove Field,
129 from our interconnections with the interstate pipelines and throughout our service
130 territory. Unlike Distribution Plant, transmission facilities are not typically connected
131 directly to our customers.

132 **Q. How is the Transmission-Not Leased Plant used to provide service to Peoples Gas'**
133 **customers?**

134 A. As I testified, Peoples Gas' Transmission-Not Leased Plant is used to move gas from
135 Manlove Field and the interstate pipeline suppliers to our local distribution systems, and
136 is useful to Peoples Gas' customers in performing those functions. Indeed, these
137 functions are essential if Peoples Gas is to provide gas to its customers and are essential
138 to its use of its assets.

139 **Q. Please explain some of the more significant projects that account for the**
140 **\$27.3 million gross additions to Transmission-Not Leased Plant for 2015.**

141 A. Two projects account for the majority of the gross additions to Transmission-Not Leased
142 Plant. They are casing remediation program and the Calumet System Upgrade Project.
143 Both are described below as a major capital projects.

144 **Q. What is General Plant?**

145 A. While I am not a plant accountant, I understand at the practical level that General Plant
146 consists of assets that are used in the provision of gas service, but that are not subject to
147 being specifically classified as Distribution, Transmission-Not Leased, Production, or
148 Storage. Illustrative examples of General Plant include real estate Peoples Gas owns
149 which is not part of a specific Distribution, Transmission-Not Leased, or Storage asset,
150 vehicles used in the performance of various Peoples Gas functions (automobiles,
151 backhoes, etc.), and tangible computer equipment.

152 **Q. How is General Plant used and useful in the provision of natural gas utility services?**

153 A. Assets included in General Plant support the provision of our utility services. We would
154 not be able to provide those services without our General Plant assets.

155 **B. Cost Control and Investment**

156 **Q. Please describe how Peoples Gas has controlled the capital cost of its Transmission-**
157 **Not Leased and Distribution functions.**

158 A. In addition to its general processes for deciding to make and managing capital
159 investments, Peoples Gas has implemented many cost saving initiatives in its operations,
160 such as the use of electronic systems. Peoples Gas continues to move more of its work
161 documentation to electronic systems which results in more consistent and efficient use of
162 resources and better retention of critical information.

163 **Q. Please briefly describe how Peoples Gas decides to make capital investments.**

164 A. Each year, Peoples Gas prepares a capital expenditures budget (the “Capital Budget”) for
165 the upcoming year, setting forth recommendations for capital expenditures for major
166 categories of plant. The budget is scrutinized at many levels and ultimately submitted to
167 the Board of Directors for its approval.

168 **Q. Once the Capital Budget is approved, how does Peoples Gas monitor its capital**
169 **expenditures?**

170 A. After the Capital Budget is approved, aggregate expenditures are tracked monthly and
171 reconciled with the Capital Budget. Forecasted expenditures are adjusted based on actual
172 expenditures to ensure compliance with the budget targets.

173 **III. SUMMARY OF MAJOR CAPITAL PROJECTS**

174 **Q. Please describe PGL Ex. 8.1.**

175 A. PGL Ex. 8.1 sets forth Schedule F-4 of the Commission's Standard Filing Requirements,
176 and contains information about Peoples Gas' major projects for 2014 and 2015.

177 **Q. For purposes of this exhibit, how did you define "major project"?**

178 A. The definition currently contained in 83 Illinois Administrative Code Section 285.6100
179 for Schedule F-4 varies by size of utility. For a gas utility the size of Peoples Gas, a
180 major project is one with a cost greater than the lower of 0.2% of net plant or
181 \$10,000,000. Peoples Gas' net plant at December 31, 2012, was \$2,131,077,763. (ILCC
182 Form 21, page 201, line 15). Therefore, for Peoples Gas, a major project would be one
183 that costs more than \$4,262,000.

184 **Q. Using this definition, how many major projects did Peoples Gas identify in PGL**
185 **Ex. 8.1?**

186 A. Six projects qualify as major projects: (1) AMRP, (2) Calumet System Upgrade Project,
187 (3) 2015 casing remediation program, (4) 2014 Gathering System Pipe Replacement
188 project, (5) 2015 Gathering System Pipe Replacement project, and (6) the LNG Control
189 System Upgrade. Mr. Puracchio discusses the last three projects.

190 **A. Accelerated Main Replacement Program**

191 **(1) Overview and History**

192 **Q. Please describe Peoples Gas' Cast Iron and Ductile Iron Main Replacement**
193 **Program.**

194 A. In fiscal year 1981, Peoples Gas decided to replace its predominantly cast iron and
195 ductile iron main system with cathodically protected steel and plastic main. In that year,
196 cast iron and ductile iron main represented 3,450 miles out of the total of 4,031 miles of

197 main in Peoples Gas' distribution system, or 86%. The decision was based, in part, on a
198 1981 study performed by Zinder Engineering which was updated in 1993 and in 2002.
199 The 1981 study recommended that Peoples Gas replace cast and ductile iron pipe in
200 certain soil types by 2030. Later updates to this study concluded that it would be
201 reasonable and prudent to complete all main replacement by 2050. By the end of 2009,
202 the percentage of cast iron and ductile iron main in Peoples Gas' distribution system had
203 been reduced to 46%, or 1,870 miles of cast iron and ductile iron main out of a total
204 4,086 miles of mains.

205 **Q. What prompted Peoples Gas to accelerate the cast and ductile iron main**
206 **replacement, now referred to as the AMRP?**

207 A. Peoples Gas determined that acceleration of the program would be beneficial. In ICC
208 Docket Nos. 09-0166/09-0167 (cons.) ("2009 Rate Cases"), the Commission approved a
209 rider that would allow Peoples Gas to recover incremental costs of accelerating its cast
210 iron and ductile iron main replacement program. The Commission found that the benefits
211 of accelerating the program include increased safety for the public and Peoples Gas
212 crews, construction and Operating and Maintenance cost savings, creation of jobs,
213 reduction in environmental impacts, and increased functionalities. *2009 Rate Cases*
214 *Order* at 195. Even though a 2011 Appellate Court decision reversed the portion of the
215 *2009 Rate Cases Order* that allowed for rider recovery, Peoples Gas moved forward with
216 the AMRP. In 2013, Section 9-220.3 of the Public Utilities Act was enacted to allow
217 rider recover of qualifying infrastructure plant, which includes AMRP. Please see the
218 direct testimony of Mr. Derricks for further discussion of Rider QIP.

219 **Q. What is the scope of the AMRP?**

220 A. There are four main system upgrade goals for AMRP: (1) to retire 1,870 miles of cast
221 iron/ductile iron gas distribution mains, (2) to upgrade approximately 300,000 service
222 pipes, (3) to relocate gas meters from inside of customer facilities to outside, and (4) to
223 upgrade the gas distribution system from a low pressure to a medium pressure system.
224 The overarching goal of these four main construction goals will be to accomplish them in
225 a manner that delivers increased safety to the public and Peoples Gas employees, quality
226 of workmanship, and efficiency of cost to our customers and other stakeholders.

227 **Q. What criteria have been utilized in deciding which mains to replace?**

228 A. In replacing cast iron and ductile iron mains, Peoples Gas utilizes criteria according to its
229 Main Ranking Index ("MRI"), which guides it in making appropriate decisions about
230 targeting which mains to replace.

231 **Q. Please describe the MRI and explain how Peoples Gas uses it in determining which**
232 **cast iron mains to replace.**

233 A. The MRI system was developed in 1995 and instituted in 1996 to identify and prioritize
234 gas main segments as candidates for replacement. A segment is defined as a unique unit
235 of pipe identified by parameters such as installation year, operating pressure, pipe
236 diameter, pipe material, and in-street and square mile boundaries. Because segment
237 lengths vary from one foot to one mile, the MRI normalizes segment lengths greater than
238 one city block to one city block for evaluation purposes. Each individual segment is
239 evaluated based on its maintenance history. Criteria taken into account include breaks,
240 cracks at taps, pipe wall thickness based on pipe coupons, visual observation, incidence
241 of leak and other repairs. Each of these criteria is assigned a multiplication factor based

on “Break Equivalents” which is then multiplied by the number of occurrences to calculate a numerical value for each criterion.

The sum of the aforementioned numerical values is then multiplied by a factor based on pipe material, operating pressure, diameter, street type and pavement cover. The result of this calculation is that a value is assigned to each segment, *i.e.*, the MRI. The MRI value is rounded to the nearest quarter point, and sorted in descending order in order to identify those segments with the highest incidence of MRI points per block.

All segments that have accumulated an MRI rating greater than 6.0 are placed on an expedited schedule to be retired. This is also true for high priority locations with an MRI rating greater than 5.0. Segments with an MRI value greater than 3.0 are viewed as possible replacement candidates when performing work on adjacent segments and when evaluating the extent of public improvement projects under consideration.

Three criteria are used to determine the pipe to be replaced in any given year. First, the MRI rating is considered, as it highlights the most problematic segments of pipe in terms of their maintenance histories. Second, Peoples Gas’ selections for replacement are coordinated with areas where the City or other governmental bodies are conducting public improvement work. This coordination with public improvement projects reduces the likelihood that Peoples Gas will need to disturb recently completed municipal infrastructure improvements in the future. Finally, replacement miles are determined from capital projects for the year, with consideration given to contiguous areas with highly ranked mains which allows for more cost effective replacement in concentrated areas.

Q. What is the process for coordinating with the City?

265 A. Peoples Gas reviews project lists provided by the City agencies to determine conflicts
266 with our AMRP long term plans. This includes the City Aldermanic requests for street
267 repaving. On a more real-time basis, Peoples Gas' construction activities are shared with
268 the City which also collects similar activities from other utilities in the City as well as
269 street repaving, etc. Peoples Gas' Departments that are involved with these construction
270 activities meet weekly to share information, coordinate projects, and resolve any
271 conflicts. We also meet monthly with City Department of Water Management as their
272 projects often involve Peoples Gas' facilities. Bi-weekly meetings are held with the
273 restoration coordinator for City Department of Water Management. Accordingly, there is
274 extensive and programmatic communication and conflict resolution with the City and
275 other private entities.

276 **Q. What type of management oversight has been implemented by Peoples Gas for the**
277 **AMRP?**

278 A. Peoples Gas has implemented a Project Management Office ("PMO") which is
279 responsible for the daily management and oversight of the program. The PMO consists
280 of Peoples Gas employees, Integrys Business Support, LLC employees, and contracted
281 employees from various consultants. The PMO provides support to Peoples Gas in terms
282 of overall planning, quality, safety, cost management, construction management, and
283 field inspection services. The PMO has developed processes and procedures and has
284 brought enhancements to existing Peoples Gas practices allowing for greater efficiencies,
285 increased production, increased quality and safety concurrent with reducing costs.

286 From a cost oversight perspective, Peoples Gas' annual Capital Budget is
287 reviewed with and approved annually by Integrys' Board of Directors. The AMRP is a

subset of that budget. The Board is updated annually as to the status of the AMRP, including completed work and forecasted work for the coming year. The Board also provides its approval to award the major contracts for the coming year. Further, the individual contract awards are approved by the Chief Executive Officer (“CEO”) or Executive Staff of members of Integrys in accordance with the Corporate Governance requirements. Any contract change orders are reviewed, negotiated, and authorized by the PMO with final approvals following the same Corporate Governance requirements.

Q. How many miles of gas distribution mains and service upgrades were completed since January 1, 2011?

A. 337 miles of new main and 31,586 services were completed. 194 miles of main were retired.

Q. In 2014, how many miles of gas distribution mains, service upgrades and miles of interstation main are expected to be completed?

A. The current plan calls for the installation of 148 miles of new main, 15,216 services and approximately 5 miles of new interstation main high pressure piping. Approximately 112 miles of main are expected to be retired.

Q. What is the associated AMRP capital budget for the year 2014?

A. For 2014, the capital budget is \$320 million. For 2014, the net plant additions due to AMRP are \$227 million. The \$93 million difference between these amounts represents \$52 million in construction work in progress and \$41 million for the cost of removal. Cost of removal is any cost incurred, related to the activity, to remove/abandon (retire) company assets. PGL Ex. 8.2 is the 2014 budget.

Q. Are you addressing any 2015 AMRP costs in your testimony?

A. No. As I stated earlier, my testimony does not address project-related costs, such as 2015 AMRP costs, that Peoples Gas has excluded from its test year revenue requirement calculation because it expects to recover those costs through Rider QIP during the test year. Please see the direct testimony of Peoples Gas witnesses Mr. Derricks, Ms. Moy, and Mr. Hengtgen for a discussion of Rider QIP and related ratemaking adjustments.

Q. Since 1981, what is the amount of cast iron and ductile iron main that Peoples Gas has replaced?

A. In 1981, there were 3,450 miles of cast iron and ductile iron main on Peoples Gas' system. At the end of 2013, 1,651 miles of such main remained. This is a reduction of 1,799 miles of main.

Q. What benefits do customers derive from the AMRP?

A. The primary reason for replacing cast iron and ductile iron main is increased safety and reliability of service for customers. Most of Peoples Gas' cast iron and ductile mains were installed from the 1860s through the 1960s. Over a long period of time, cast iron and ductile iron pipes deteriorate as the pipe walls are diminished through corrosion. Modern plastic or cathodically protected steel medium pressure distribution systems are used to replace the predominantly low pressure cast iron/ductile iron mains. Medium pressure distribution systems are inherently more reliable than older vintage low pressure systems. A common problem with old cast iron/ductile iron low pressure systems is that they are susceptible to ground water infiltration. When ground water collects in gas mains, the flow of gas is restricted and, in many cases, completely blocked, causing service outages. Ground water infiltration also creates the need to collect, transport and

333 dispose of liquids for which there are environmental regulations governing such
334 activities. Ground water cannot physically infiltrate medium pressure gas distribution
335 systems eliminating this common problem in low pressure systems. Furthermore,
336 modern medium pressure gas systems utilize smaller diameter piping than old low
337 pressure systems. Smaller piping allows for more cost effective replacement of
338 comparable capacity low pressure systems.

339 **Q. Are there other customer benefits derived from the AMRP?**

340 A. Yes, all gas distribution piping systems require regulating stations which reduce pressures
341 for downstream piping systems. By eliminating low pressure systems, an entire class of
342 low pressure regulating stations can be eventually phased out. Eliminating low pressure
343 regulating stations reduces ongoing maintenance cost and improves reliability.

344 Also, when upgrading low pressure systems Peoples Gas relocates most gas
345 meters from inside buildings to outdoors. By relocating meters outdoors, customers are
346 not inconvenienced with federally mandated periodic inside safety inspections for
347 company facilities.

348 Finally, there are environmental benefits in the form of reduced greenhouse gas
349 emissions due to fewer leaks. The newer system also promotes energy efficiency by
350 providing a higher supply pressure to meet the requirements of newer, energy efficient
351 appliances.

352 **Q. What conclusions have you reached?**

353 A. The AMRP has been conducted in a reasonable and prudent manner. The criteria used to
354 identify mains for replacement and the schedule Peoples Gas is following have been
355 carefully evaluated and applied with due regard for system safety and cost effectiveness.

The investment in AMRP has been prudently undertaken, is reasonable in cost, and the facilities installed or to be installed are or will be used and useful in providing utility service.

B. Calumet System Upgrade Project

Q. Please describe Peoples Gas' Calumet System Upgrade Project.

A. The existing Calumet System provides gas service to the City's southeast side. The system consists of three high-risk transmission pipeline segments inside a High Consequence Area of the City: Calumet Line #2, Calumet Line #3, and the 112th and 134th Street Laterals. The project will require retirement of the Calumet Line #2 (24 inch diameter) pipeline and retrofitting of the Calumet Line #3 (36 inch diameter) pipeline, upgrades to existing regulator stations, and construction of new high-pressure and medium-pressure stations. This is a large construction project that will require several years of significant field work.

Q. What is the scope of work for this project in 2014?

A. The scope of work for 2014 includes (1) constructing three river crossings, (2) constructing two or three railroad crossings, (3) retrofitting 2 to 4 miles of the Calumet #3 pipeline for in-line inspection (pigging) and hydrostatic pressure testing, (4) retirement of 3 miles of the Calumet #2 pipeline (north of 112th St), (5) reconstruction of one large gate station (98th & Baltimore), (6) reconstruction of three small regulator stations, and (7) construction of one new regulator station on 106th Street. See PGL Ex. 8.3 for screen shots showing the executive approvals for multiple purchase requisitions that are in place for engineering and materials needed for this project.

378 **Q. What prompted Peoples Gas to upgrade this system?**

379 A. Various material, design, construction, documentation, and operational challenges with
380 the existing pipeline segments will make the Pipeline and Hazardous Materials Safety
381 Administration required pipeline integrity inspections, reporting, remediation, and
382 compliance challenging and costly for years to come. Because the pipelines were
383 constructed more than 50 years ago, before the Federal Pipeline Safety Standards were
384 adopted, the pipelines were not designed to accommodate modern inspection methods,
385 such as in-line inspection. This greatly limits Peoples Gas' options for pipeline integrity
386 work. These inspections are important given the pipelines' proximity to the high
387 consequence area of the City.

388 **Q. What is the status of this multi-year construction project?**

389 A. Engineering work has been underway since 2012 in preparation of work on Calumet
390 Line #2 and Line #3. In 2013, Peoples Gas completed (1) engineering and procurement
391 of materials to replace three regulator stations on the Calumet Line #3 pipeline, (2)
392 designing and permitting the river and railroad crossings, and (3) upgrading the medium
393 pressure system to move customers off of the transmission lines. The most significant
394 portion of construction is scheduled for 2014 with lesser amounts scheduled in 2015 and
395 2016.

396 **Q. What benefits do customers derive from the Calumet System Upgrade Project?**

397 A. Redesigning and upgrading the system will ensure a safe and reliable system for Peoples
398 Gas customers on the City's southeast side. Replacement of the pipeline segments with
399 new facilities designed and integrated with the interstation main system will eliminate

risks associated with a system that is more than 50 years old. As a result, capacity into the City will be maintained and reliability will be improved.

Q. Are there other customer benefits derived from this project?

A. Yes, mismatched operating pressures currently found in the Calumet System will be eliminated, increasing the operating flexibility. With compatible operating pressures, the entire Calumet Line system will be able to provide capacity and reliability into the Peoples Gas interstation main system.

Q. Is there supporting documentation for this project?

A. Yes. PGL Ex. 8.3 is the executive approvals for the project. PGL Ex. 8.4 shows project costs for years 2013 through 2014. PGL Ex. 8.5 is the approved business case for the project.

Q. Are you addressing any 2015 Calumet System costs in your testimony?

A. No. As I stated earlier, my testimony does not address project-related costs, such as 2015 Calumet System costs, that Peoples Gas has excluded from its test year revenue requirement calculation because it expects to recover those costs through Rider QIP during the test year. Please see the direct testimony of Peoples Gas witnesses Mr. Derricks, Ms. Moy, and Mr. Hengtgen for a discussion of Rider QIP and related ratemaking adjustments.

Q. What conclusions have you reached?

A. The investment in the Calumet System Upgrade Project is a prudent decision, is reasonable in cost, and the facilities installed will be used and useful in providing utility service.

C. Casing Remediation Program

Q. Please describe the casing remediation program.

A. For cathodically protected steel carrier pipelines inside casing pipes, electrical isolation must be maintained between the carrier and casing pipes to allow for proper cathodic protection levels to be maintained on the carrier pipe. Peoples Gas has surveyed and identified a number of transmission line casing pipes that appear to be electrically in contact with the carrier pipe. These casing pipes must be remediated by either resolving the electrical short, or in some cases, by removing the casing pipe entirely.

Q. What are planned costs for casing pipe remediation?

A. Peoples Gas has budgeted \$4 million in 2014 and \$6 million in 2015 to remediate shorted casing pipes.

Q. What conclusions have you reached?

A. The investment in the pipeline casing remediation is a prudent decision, is reasonable in cost, and needed to maintain compliance with federal pipeline safety regulations.

IV. GAS PLANT IN SERVICE ADDITIONS SINCE THE 2012 RATE CASES

Q. Are you familiar with the forecasted plant added to rate base since the last approved rate base in the 2012 Rate Cases?

A. Yes. I will address the additions of plant related to Distribution, Transmission-Not Leased and General. Others will address additions to underground storage, liquefied natural gas, intangible plant, production, recoverable natural gas, and CWIP.

Q. What assumptions were made for additions to distribution plant?

A. Most of the budgeted dollars for 2014 through 2015 additions to distribution plant are related to system improvements and public improvements.

Q. Please describe the proposed additions to Transmission-Not Leased.

A. As I previously mentioned the majority of additions to transmission-not leased is related to the Calumet System Upgrade project and the casing remediation program. The remainder of the additions includes smaller projects such as the Launcher Fitting Project on the 24-inch Elwood Pipeline and the replacement of control valves at Manhattan Station.

Q. Please describe the proposed additions to General Plant.

A. The most significant additions to General Plant include the replacement of retired transportation and power equipment including trucks, cars, and backhoes. Other additions include replacement computers, improvements at the office and reporting center, and purchase of shop equipment and tools. These plant additions are or will be prudently acquired at a reasonable cost, and used and useful in providing service to our customers.

Q. Do you anticipate any changes in the way Peoples Gas decides how to make capital investments and how those expenditures are monitored?

A. No. I expect that Peoples Gas will continue to recommend a capital expenditures budget for the upcoming year, setting forth recommendations for capital expenditures for major categories of plant. The budget will be scrutinized at many levels and ultimately submitted to the Board of Directors for its approval. Aggregate expenditures will be

464 tracked monthly and reconciled with the Capital Budget. Forecast expenditures will be
465 adjusted based on actuals to ensure compliance with the budget targets.

466 **V. SCHEDULE C-4 ACCOUNT VARIANCES**

467 **Q. Ms. Christine Gregor indicates part of the increase in Total Transmission Expenses**
468 **– Maintenance between calendar year 2012 and the test year, 2015, on Schedule C-4**
469 **is attributable to the Calumet System Upgrade Project. See PGL Ex. 5.0. Can you**
470 **explain the increase in maintenance expenses associated with the Calumet System**
471 **Upgrade Project?**

472 **A.** As previously noted, the Calumet System Upgrade Project includes retrofitting sections
473 of the Calumet Line #3 piping to allow for in-line inspection. The cost of the in-line
474 inspections, integrity digs and any necessary repairs that may be discovered during the in-
475 line inspection are included in Transmission Maintenance Expense. There were no costs
476 associated to the Calumet System Upgrade Project in 2012. The project was approved by
477 the Commission in the 2012 Rates Cases. Work associated with the project began in
478 2013.

479 **Q. How were these costs developed?**

480 **A.** The costs associated with the in-line inspection and forecasted repairs were based on data
481 collected from recent similar work on other sections of Peoples Gas' system.

482 **Q. Ms. Gregor indicates part of the increase in Total Distribution Expenses –**
483 **Operation and Total Distribution Expenses – Maintenance between 2012 and the**
484 **test year, 2015, on Schedule C-4 is attributable to the Legacy Sewer Cross Bore**

Program and improved compliance with pipeline safety rules. See PGL Ex. 5.0.

Can you explain the increase?

A. There were no costs associated to the Legacy Sewer Cross Bore Program in 2012. The program was approved by the Commission in the 2012 Rate Cases. The work associated with the project began in 2013. In addition, Peoples Gas has added both union and non-union employees since 2012 to address the increase in the regulatory workload as noted later in Section VI of this testimony.

Q. Ms. Gregor also indicates part of the increase in Total Distribution Expenses – Maintenance between 2012 and the test year, 2015, on Schedule C-4 is attributable to the CDOT Regulations. See PGL Ex. 5.0. Can you explain the increase in operating costs associated with changes in CDOT regulations?

A. CDOT regulations were updated in July of 2012. However, since the changes occurred mid-year in 2012, the full year of costs were not reflected in the 2012 actual data. In addition, many of the changes in the 2012 update did not take effect until 2013. CDOT has also finalized another update to the regulations that became effective on January 13, 2014. The most significant change is the requirement to perform full perimeter intersection restoration including all ramps that are not in compliance with the Americans with Disabilities Act.

VI. TEST YEAR EMPLOYEES

Q. What is the magnitude of the headcount increase for Peoples Gas?

A. Peoples Gas' headcount will increase from 1,306 at the end of 2013 to 1,356 at the end of 2014. The headcount of 1,356 is projected for the entire test year of 2015.

Q. Please describe some of the reasons for the headcount increases from the 2013 level.

A. There are two main drivers for the headcount increases for Peoples Gas since 2013. The first is improved compliance with federal and state pipeline safety regulations and the second is the AMRP.

Q. Please explain the compliance drivers.

A. A number of pipeline incidents that occurred throughout the country in 2010, 2011 and 2012 have drawn increased attention to compliance with pipeline safety rules. In addition, new rules are being proposed to further strengthen regulatory oversight of pipeline safety.

Q. How has the increased regulatory oversight affected Peoples Gas?

A. Peoples Gas has experienced an increased frequency of pipeline safety audits from the Commission pipeline safety staff. These audits have uncovered areas where Peoples Gas must strengthen its compliance with federal pipeline safety regulations. For example, Peoples Gas agreed to modify its procedure for conducting inside safety inspections. This change has resulted in more than doubling the triennial inside safety inspections required from a total of 370,000 to 750,000 inspections.

Q. What other actions has Peoples Gas taken to enhance its pipeline safety compliance program?

A. Peoples Gas has established a new pipeline safety compliance organization. In addition, Peoples Gas is increasing the number of field supervisors to oversee compliance with pipeline safety regulations related to the execution of both our maintenance and construction activities. To enable supervisors to spend more time in the field and lessen

529 their administrative responsibilities, Peoples Gas is adding administrative and planning
530 resources. These resources will allow for more efficient and effective planning of
531 compliance and maintenance related work as well as more accurate documentation of
532 work performed.

533 **Q. Please explain the increase in headcount for the AMRP.**

534 A. The year 2011 was Peoples Gas' first year of the AMRP. Many lessons were learned in
535 this first year, including the difficulties of coordinating and scheduling customer transfer
536 work to the new distribution system. The project also experienced start-up related delays
537 that compressed customer work to the end of 2011 and into 2012. To address these
538 challenges, Peoples Gas accelerated the hiring of employees to work on the AMRP. To
539 improve the planning, coordinating, and scheduling of customer transfer work, a new
540 construction planning department was created and staffed.

541 **Q. How many of these compliance and AMRP positions have been hired to date?**

542 A. All of these positions have been approved and most have been filled already.

543 **Q. Do you expect this staffing level to be long term?**

544 A. Yes, there is no reason to expect any lessening of pipeline safety compliance standards in
545 the future. Similarly, the AMRP will take years to complete and will require long term
546 resources.

547 **Q. Does this conclude your direct testimony?**

548 A. Yes it does.